

XXVIII.—*Note on the Decrease in the Weight of Eggs as Incubation advances.* By HUGH S. GLADSTONE, M.A., F.Z.S., M.B.O.U.

DURING the spring of 1903, when picking up Pheasants' eggs which had been laid in precarious places, such as the sides of roadways or near human habitations, I happened to weigh some of them, and was at once struck by the variation in their weight. Thinking that this variation might be caused by the length of time the eggs had been incubated, I had ten newly-laid eggs from ten different hens marked, and weighed them every fourth day, with the following results.

I reckoned 27 grs. = 1 dr.

Morning of	1st day. 19. v. 03.	4th day. 22. v. 03.	8th day. 26. v. 03.	12th day. 30. v. 03.	16th day. 3. vi. 03.	20th day. 7. vi. 03.	23rd day. 10. vi. 03.	24th day. 11. vi. 03.
No. on egg.	drs. grs.	drs. grs.	drs. grs.	drs. grs.	drs. grs.	drs. grs.	drs. grs.	drs. grs.
1.	16 14	16 6	15 25	15 16	15 10	15 5	Broken by accident, 9. vi. 03: contain- ed an embryo.	
2.	19 0	18 14	18 5	17 21	17 10	17 1	16 19	Chipped by chick.
3.	16 12	16 2	15 17	15 7	14 26	14 7	14 4	"
4.	17 19	17 6	16 21	16 13	15 15	14 16	13 19	"
5.	16 24	16 18	16 7	15 24	15 16	15 12	14 25	"
6.	19 11	19 0	18 20	18 8	17 23	17 13	17 7	"
7.	17 16	17 5	16 22	16 14	16 3	15 23	15 9	"
8.	16 20	16 9	15 24	15 15	15 8	15 0	14 0	"
9.	16 14	16 6	15 25	15 17	15 11	15 6	14 20	"
10.	17 20	17 8	16 21	16 14	16 4	15 23	15 9	"

This proves that a general decrease in the weight of the eggs took place whilst incubation was proceeding, the following table shewing the average decrease every fourth day :—

Variation in weight from first day.		Average weight.
grs.		drs. grs.
	First day	17 12
-10	Fourth day	17 2
-21	Eighth day	16 18
-30	Twelfth day	16 9
-40	Sixteenth day	15 26
-49	Twentieth day	15 17
-66	Twenty-third day ..	15 0